

AMENDMENT

In The Claims

Please cancel claims 1-22 without prejudice. Please add the following new claims 23-44:

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--23. A method for organizing spatial data comprising the steps of:

- a) parsing the spatial data into a plurality of packets;
- b) segmenting the packets;
- c) reducing a size of the packets; and
- d) generating a name for each of the packets.

24. The method of claim 23, wherein the spatial data comprises topographic information comprising a plurality of elements containing geodetic coordinates.

25. The method of claim 23, wherein the step of parsing the spatial data comprises:
selecting at least one entity within the data, the entity selected from a group consisting of: a road, a railway, an airport, a river, a lake, a shore line, a park, an entity comprising a geometric shape, and an entity comprising a substantially rectangular shape.

26. The method of claim 23, wherein the step of parsing the spatial data comprises:
generating a substantially rectangular element comprising about 1° longitude and about ½° latitude.

27. The method of claim 23, wherein the step of parsing the spatial data comprises:
separating a topographic element from an attribute element;

wherein the topographic element comprises elements expressed using a geodetic coordinate system; and

the attribute element is related to the topographic element.

28. The method of claim 23, wherein the step of segmenting the packets comprises:

dividing the packets into at least one element, the element selected from a group consisting of: an 8x8 grid, a 64x64 grid, a substantially rectangular grid comprising about 1° longitude and about ½° latitude, and a substantially rectangular grid comprising about 1/8° longitude and about 1/16° latitude.

29. The method of claim 23, wherein the step of reducing the size of the segmented packets comprises:

eliminating elements selected from a group consisting of: a polygon, a lake, a geographic area, a topographic element and an attribute element.

30. The method of claim 23, wherein the step of reducing the size of the segmented packets comprises:

eliminating a plurality of data points from a topographic element.

31. The method of claim 23, wherein the step of reducing the size of the segmented packets comprises:

transforming a geodetic coordinate from a real number to an integer number, wherein the integer number ranges from about 0 to about 65535.

32. The method of claim 23, wherein the step of reducing the size of the segmented packets comprises:

eliminating a plurality of data points from at least one topographic element by applying an angle comparison between an adjacent topographic element line, wherein at least one data point is eliminated if an angle between the at least one topographic element and the adjacent topographic element line is about 180°.

33. The method of claim 23, wherein the step of generating the name for each of the packets comprises the step of generating a location-relevant naming system.

34. The method of claim 23, wherein the step of generating the name for each of the packets comprises the step of generating a location-relevant naming system, wherein the packet name comprises location information representing an offset from an earth origin.

35. The method of claim 34, wherein the earth origin is selected from a group consisting of: a North Pole, and a location other than the North Pole.

36. The method of claim 23, further including the step of:
repeating any one of steps a, b, c and d to process an entire spatial database.

37. A method for displaying a map, the method comprising the steps of:
obtaining information relating to a location;

calculating at least one packet name;
determining a data level;
displaying the map.

38. The method of claim 37, wherein the step of calculating the at least one packet name comprises:

computing the at least one data packet name using a geodetic coordinate.

AT 39. The method of claim 37, wherein the step of calculating the at least one packet name comprises:

calculating a request location; and

using the request location to calculate the at least one packet name.

131 cat. 40. The method of claim 37, wherein the step of calculating the at least one packet name comprises:

computing four adjacent data packet names;

fetching the packets from a server; and

combining an information contained in the packets to generate a map.

41. The method of claim 37, wherein the step of determining the data level comprises:

determining a resolution level selected from a group consisting of: an address, a city, a zip code and a building floor plan.

42. The method of claim 37, further including the step of:

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cached at least one data packet until an amount of computer storage space is filled, and
determining which packets should be replaced.

43. The method of claim 37, further including the step of:
checking a local cache before requesting a data packet from a remote device.

44. A method for organizing spatial data comprising the steps of:
a) means for parsing the spatial data into a plurality of packets;
b) means for segmenting the packets;
c) means for reducing a size of the packets; and
d) means for generating a name for each of the packets.--
